my kids and grandkids and great-grandkids, there is going to be a day after tomorrow.

Now, I will vote to drill in ANWR and offshore when a commitment is made that all of the energy that we get from those fields will be invested in alternatives. You see, today we have a situation where we have run out of time and there is no surplus energy. If there was surplus energy, oil wouldn't be $105 a barrel this morning.

When I say we have run out of time, I am really very critical of what we, the world, has done in the last 28 years. I say 28 years because that takes us back to 1980. And, by 1980, it was absolutely certain that M. King Hubbard was right about the United States. We peaked in 1970. By 1980, we are sliding down the other side of what is called Hubbard's Peak. So we knew he was right about the United States. Now, I believe it was in 1979, just a year before, that he predicted the world would be peaking about now.

And I ask you, if M. King Hubbard was so right about the United States, shouldn't there have been some concern that maybe, just maybe, he might be right about the world? And wouldn't it have been appropriate to look at that possibility and put some programs in place that would address that potential eventuality?

You know, it is very difficult to look back on what we have done without using a couple of not very complimentary analogies. When we first found that incredible wealth under the ground, and, boy, that was incredible wealth. One barrel of oil, and we use about 22 million barrels a day in our country, by the way. One barrel of oil has the work output of 12 people working all year, 25,000 man hours of work.

When I first saw that number, I thought that can't be true; 12 people working all year, one barrel of oil has that much energy in it? And then I thought about that one gallon of gasoline, still cheaper than water in the grocery store if you are buying it in little bottles, how far that takes my Prius. Our Prius now is 47 miles per gallon averaging over the last maybe 20,000 miles. Now, I could pull my Prius 47 miles. That is almost all the way from here to my home in Frederick. That would take me a long while. I would have to get come-alongs and hook to the guardrail and so forth to pull the car. I could do it. And so I finally said, gee, that is probably right. Every barrel of oil has the energy equivalent of 25,000 man hours of work, 12 people working all year for you.

As a matter of fact, I saw a statistic recently that was really interesting. If there was no gas, oil, or coal, no nuclear, no sun, no hydro, if the only power available was the power of human activity to enjoy the quality of life that each of us enjoys, there would have to be 300 people out there working. That is the amount of energy from fossil fuels that each one of us consumes. We live as well as if there were 300 people out there working to support our quality of life. No wonder Hyman Rickover referred to this as a golden age.

The next chart kind of shows where we are and where we are going. All three of these groups want to move away from fossil fuels to alternatives, of course for very different reasons and, again, I stop criticizing each other's premise, because what we want to do to solve the problem as we see it is exactly the same thing: Move away from fossil fuels to renewables. How are we going to do that?

Now, there are some finite resources that are really quite unconventional, and we are exploiting some of them now. From the tar sands in Canada, we are getting about 1 million barrels of oil a day. That is with heroic efforts. They are using local gas which is stranded, which means that it is far away from any population and, therefore, it is cheap and so you can use it for something like this. They have a huge tailings pond which is full of all sorts of noxious chemicals. And the vein, if you are thinking of it as the vein, is on top and it will soon have to duck under an overlay so they have to exploit it in situ, and they don't know how to do that yet. They have a shovel, which lifts 100 tons at a time. They dump it in a truck, which hauls 400 tons. They haul it to a cooker, which cooks it until it loosens up its stiff oil and it flows, and they add some chemicals to it to keep it flowing when it cools down. They are getting about 1 million barrels a day, and that is 1 million out of 88 million that the world is producing. So a bit more than 1 percent, but it is not sustainable and they know it is not. They are going to need more oil, they are going to run out of water by and by.

But if they could continue this exploitation, there is more potential oil in the tar sands of Canada than there is in all of the huge oil reserves that we showed on that map of the world that we showed earlier. So there is a huge potential there.

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But remember, in any one of these things, you need to look at energy-profit ratio, how much energy you need to put in to get out a unit of energy. And if you are putting in more energy than you get out, obviously you are not going to do that, and you are going to move on to some other source.

The oil shales in our western United States, they have reserves at least as large and maybe some larger, some believe, up in the trillions of barrels of oil.

By the way, and we will come to the number later, but the world had about we believe 2 trillion barrels of recoverable oil. We have recovered about 1 trillion of those barrels. Most authorities believe there is another trillion to be recovered. Some believe we can find more and get more out of the present reservoirs.

But in spite of the brightest people in the world, the most aggressive economy in the world, we have not been able to reverse our slide down the other side of Hubbert's Peak. So when you are listening to people speaking about a rosy future with abundant oil, remember that the United States with all of our superiority has not been able to reverse our slide down the other side of Hubbert's Peak.

There are a number of organizations looking at exploiting that. It is called ''the rocks that burn'' by the Indians. When you heat it up, it becomes oil. It is not exactly oil in the form that it is found. Can we develop that, how quickly, how much will we get from it, we will certainly get something from it by and by, but remember this energy-profit ratio.

Coal. We have a lot of coal. Not as much as we thought we had. The National Academy of Sciences took a new look at that, and they said that the conventional wisdom that there was 250 years out there at current use rates, and be very careful when someone mentions current use rates when making projections for the future because, with growth, that time duration really shrinks.

The National Academy of Sciences now says we have something like 100 years of coal at current use rates. I have a chart that shows what that really means in terms of energy that is available to us.

Then we have nuclear. We have three different potential sources of nuclear energy. The one that the world is using for producing energy is fusion, light water reactor plants. France gets about 75 to 80 percent of their electricity from fusion. We get about 20 percent. We are much bigger than France and so we produce more electric power than France produces, but not so high a percentage of what we use.

Fissile uranium is a finite resource. The world will one day run out. I have no idea when that will be because I get wildly divergent estimates when I ask people how long will it last: 10 years, 30 years, 100 years. We need an honest broker. It is hard to have a discussion when there isn't agreement on the facts. I would like to commission the National Academy of Sciences to help us decide on what the reserves are and what the resources are so we can have a productive dialogue. But even when we run out of fissile uranium, we still can get nuclear power from what we call breeder reactors.

They have problems, and you are producing stuff that is potentially weapons grade and you are hauling it around for enrichment, and there are opportunities for terrorists. Then there is an end product that you need to store away for a quarter of a million years. I understand there are potential breakthroughs there where we can burn more of this fuel, and we end up with a waste product which is much less radioactive with a shorter half-life. So the storage problems are going